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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,617	03/29/2000	Gregory Graham	36512/CAG/G373	8377
33401	7590	04/23/2004	EXAMINER	
MCDERMOTT, WILL & EMERY (LOS ANGELES OFFICE) 2049 CENTURY PARK EAST 34TH FLOOR LOS ANGELES, CA 90067-3208			AGUIRRECHEA, JAYDI A	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,617

Applicant(s)

GRAHAM ET AL.

Examiner

Jaydi A. Aguirrechea

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66-83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/04 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 66 and 68-70 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4645961 to Malsky (Malsky).

Malsky discloses a stator having an ironless a coil (60) disposed in a gap, the coil comprising concentric inner and outer winding portions separated by a continuous fiber strand wrapped a plurality of times around the inner winding portion (Figure 3), each of the winding portions comprising a plurality of conductive bands with each of the conductive bands of one of the winding portions being coupled to one of the conductive bands of the other winding portion, the winding portions being impregnated with an encapsulation material. (Column 3, lines 44-55)

With regards to claim 68, the encapsulation material is a non-layered material.

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With regards to claim 69, Malsky discloses the non-conductive fiber strand extending around the circumference of the inner winding portion to the end of the other.

With regards to claim 70, it is inherent that the encapsulation material will fill the voids of the insulation layer.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 67 and 71 rejected under 35 U.S.C. 103(a) as being unpatentable over Malsky.

Malsky discloses the claimed invention except for the second continuous non-conductive fiber strand extending around the circumference of the outer winding portion a plurality of times. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use multiple fiber strands extending around the circumference of the outer winding, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 PSQ 8. In the instant case, it would have been obvious for the purpose of reinforcing the structure.

6. Claims 72, 74, and 77-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsky.

Malsky discloses the claimed invention but is silent with respect to the specific values of the thickness, tensile stress, yield strength, percent elongation and hardness. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to disclose similar values, since it has been held that discovering an optimum value of a result effective

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variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claims 73 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsky.

Malsky discloses the claimed invention but is silent with respect to the material used as the non-conductive fiber strand and for the encapsulation. One with ordinary skill in the art would know that glass is a non-conductive material and that the polyimide is well known for its adhesive strength, desirable in rotating machines.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use polyimide and glass since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

8. Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malsky in view of JP 05328678A to Tsubaki (hereinafter Tsubaki).

Malsky is silent with respect to the sheet metal windings comprising precision machined and rolled copper. Toshiba discloses that each of the conductive sheet metal windings (4) comprises precision machined and rolled copper (see abstract). The invention of Toshiba has the purpose of improving dimensional accuracy between the respective coils. It would have been obvious at the time the invention was made to modify the inductive coil of Malsky and provide it with the precision machined and rolled copper disclosed by Toshiba for the purpose of improving dimensional accuracy between the respective coils.

9. Claims 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malsky in view of US Pat. 5793138 to Kliman et al. (hereinafter Kliman).

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Malsky disclose an inductive coil as described above. However, fails to disclose the electrically insulated flywheel is made of metal; the electrical insulation comprising an anodized outer surface of the flywheel, the anodized outer surface being in contact with the interior portion of the induction coil and the metal comprising aluminum.

Kliman et al. disclose that the electrically insulated flywheel is made of metal, the electrical insulation comprising an anodized inner surface of the induction coil (column 4, line 66 through column 5, line 2), the anodized inner surface being in contact with the exterior portion of the flywheel and the metal being aluminum. The invention of Kliman et al. has the purpose of insulating the induction coils from the flywheel material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to anodize the outer surface of the flywheel instead of the inner surface of the induction coil since it has been held that a mere reversal of the essential working pads of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167. It would have been obvious at the time the invention was made to modify the inductive coil of Malsky and provide it with anodizing feature disclosed by Kliman et al. for the purpose of insulating the induction coils from the flywheel material.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the flywheel of anodized aluminum since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Lethin, 125 USPQ 416.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

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Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claim 66 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No.

10/125809. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 66 disclose, as well as claim 1 in the co-pending application an inductive coil comprising concentric inner and outer winding portions separated by a continuous fiber strand wrapped a plurality of times around the inner winding portions, each of the winding portion comprising a plurality of conductive bands coupled to the other conductive band, the winding portions being impregnated with an encapsulation material.

In the copending application the Applicants are claiming the complete motor structure, i.e. rotor, stator and windings, comprising the specific coil as described in claim 1 of the instant application. The coil claimed in the instant application is to be used in an electromotive device, this device could be an electric brushless motor.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

12. Applicant's arguments with respect to claims 47-65 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

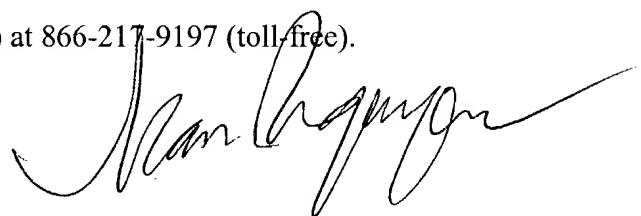
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 571-272-2018. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schüberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JA
JAA
4/15/04



**TRAN NGUYEN
PRIMARY EXAMINER**